							21166	t 1 o		
cment	of Commerce	Patent and	d Trademark Office		Seria	al No.: Unk	nown			
						Filing Date: 12/20/01				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT						2				
''MULTI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"						Group Art Unit: Unknown				
						aminer Name: Unknown				
Express Mail Receipt No. EF055078353US Attorney Docket							No.: AO	-001		
		U.S. I	Patent Document	s						
	Document Number	Date	Name	С	lass	Subclass	Filing Date, If Appropriate			
AA	6,301,403 B1	10/09/01	Heanue et al.	3	85	18				
AB	6,253,001 B1	06/26/01	Storrs T. Hoen	3	85	17				
AC	6,028,689	02/22/00	Michalicek et al.	3	59	224				
AD	5,872,880	02/16/99	Ronald S. Maynard	3	85	88				
AE	6,283,601 B1	09/04/01	Hagelin et al.	3	59	871				
		Foreign	Patent Documer	nts						
							Transla	tion		
	Document Number	Date	Country	С	lass	Subclass	Yes	Мо		
AF				┼						
	PT (Includi	ng Author	Title Date	Pe	rtine	ent Pages.	Etc.)	L		
		_								
AG	American, pages 96-99. January 2001.									
AH	"Construction and performance of a 576x576 single-stage OXC," Herzel Laor. LEOS, San Francisco, California, 3 pages. November 8, 1999.									
ΑI	"Application of micro- and nanotechnologies for the fabrication of optical devices," Wolfgang Ehrfeld and Hans-Dieter Bauer. SPIE Vol.									
AJ	"PERFORMANCE OF A 576x576 OPTICAL CROSS CONNECT," Laor, et al. NFOEC,									
AK	"Control and shape design of an electrically-damped comb drive for digital switches," Yijian Chen. Proceedings of SPIE Vol. 4178, 2000. Pages 387-394.									
1 1										
	AA AB AC AD AE AF AG AH AI AJ	RMATION DISCLOSURE FI-AXIS MICRO-ELECT  Il Receipt No. EFO  Document Number  AA 6,301,403 B1 AC 6,028,689  AD 5,872,880  AE 6,283,601 B1  Document Number  AF  PROUTING PA American, pa American, pa AH Canstruction Laor. LEOS, AI Optical devi 3276, page 2 AJ Chicago, Ill "Control an	RMATION DISCLOSURE STATEMENT FI-AXIS MICRO-ELECTRO-MECHANI  Il Receipt No. EF055078353US  U.S. I  Document Number  AA 6,301,403 B1 AC 6,028,689 AC 6,028,689 AE 6,283,601 B1  Foreign  Document Number  AF  Document Number  AF  Document Number  AF  CIncluding Author  AG  "ROUTING PACKETS WITH American, pages 96-99.  "Construction and performance of the companies o	RMATION DISCLOSURE STATEMENT BY APPLICANT  FI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"  II Receipt No. EF055078353US  U.S. Patent Document  Document Number  Date  Name  AA 6,301,403 B1  AB 6,253,001 B1  AC 6,028,689  AD 5,872,880  AD 5,872,880  AE 6,283,601 B1  Foreign Patent Document  Foreign Patent Document  Document Number  Date  Country  AF  CRART (Including Author, Title, Date, AG American, pages 96-99. January 2001.  AH Construction and performance of a 576x5 Laor. LEOS, San Francisco, California,  "'Application of micro- and nanotechnologous optical devices," Wolfgang Ehrfeld and 13276, page 2 and pages 4-14.  AJ Chicago, Illinois, pages 1-5. September  "Control and shape design of an electric	U.S. Patent Documents    Document   Number   Date   Name   Country	RMATION DISCLOSURE STATEMENT BY APPLICANT  INVERTIGATION DISCLOSURE STATEMENT BY APPLICANT  INVERTICANT BY APPLICANT  INVERTICAN	RMATION DISCLOSURE STATEMENT BY APPLICANT  Filing Date: 12  RMATION DISCLOSURE STATEMENT BY APPLICANT  FILING DATE: Novo  Group Art Unit:  Examiner Name:  INVENTED DOCUMENT  Number  Date  Name  Class  Document Number  Date  Name  Class  Subclass  AB 6,253,001  AB 6,253,001  AB 6,253,001  AC 6,028,689  02/22/00  AD 5,872,880  O2/16/99  AB 6,283,601  AB 6,283,601  B1  Foreign Patent Documents  Document Number  Date  Country  Class  Subclass  AB 6,283,601  B1  Foreign Patent Documents  Country  Class  Country  Country  Class  Country  Class  Country  Country  Country  Class  Country  Class  Country  Class  Country  Class  Country  Country  Class  Country  Class  Country  Country  Class  Country  Country  Class  Country  Country	RMATION DISCLOSURE STATEMENT BY APPLICANT  FI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"  FI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"  Examiner Name: Unknown  Attorney Docket No.: AO  U.S. Patent Documents  U.S. Patent Documents  Document Number  AA 6,301,403 10/09/01 Heanue et al. 385 18  AB 6,253,001 06/26/01 Storrs T. Hoen 385 17  AC 6,028,689 02/22/00 Michalicek et al. 359 224  AD 5,872,880 02/16/99 Ronald S. Mavnard  AE 6,283,601 09/04/01 Hagelin et al. 359 871  Foreign Patent Documents  Foreign Patent Documents  Translation  Foreign Patent Documents  AF Country Class Subclass Yes  AF Number Date Country Class Subclass Yes  AF Naminary 2001.  CR ART (Including Author, Title, Date, Pertinent Pages, Etc.)  AG American, pages 96-99. January 2001.  AN "COnstruction and performance of a 576x576 single-stage OXC," Herzellaor. LEOS, San Francisco, California, 3 pages. November 8, 1999.  AI Optical devices," Wolfgang Ehrfeld and Hans-Dieter Bauer. SPIE Vol 3276, page 2 and pages 4-14.  AJ "PERFORMANCE OF A 576x576 OPTICAL CROSS CONNECT," Laor, et al. NF Chicago, Illinois, pages 1-5. September 26, 1999.  "Control and shape design of an electrically-damped comb drive for		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

									- ALTERNATION	
U.S. Department of Commerce, Patent and Trademark Office				Serial No.: Unknown						
					Filing Date: 12/20/01					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT						Inventors: Novotny, et al.				
"MULTI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"						Group Art Unit: Unknown 2673				
						Examiner Name: Unknown				
Express Mail Receipt No. EF055078353US						Attorney Docket No.: AO-001				
U.S. Patent Documents										
			0.5. 1	Tacene Documents	<u> </u>			m:1:	Data	
*Examiner Initial		Document Number	Date	Name	Class		Subclass	Filing Date, If Appropriate		
	AL				_					
Foreign Patent Documents										
								Translation		
		Document	Date	Country	C:	lass	Subclass	Yes	No	
	AM	Number		<u> </u>	-					
	Al-1				L					
					L					
OTH	OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)									
60.Ca	AN	''THE RISE OF OPTICAL SWITCHING,'' David J. Bishop et al. Scientific American, pages 88-94. January 2001.								
		"A LARGE-DEF	LECTION ELE	CTROSTATIC ACTUATO	R I	FOR OP	TICAL SWITC	CHING		
₩ (·	AO	APPLICATIONS," John D. Grade, Hal Jerman and Thomas W. Kenny. Presented at Hilton Head, 2000. 4 pages.								
		"FLIP CHIP CHALLENGES," Steve Bezuk, PH.D. General Manager, Applied								
i.C	AP	Technology Development and Flip Chip Kyocera America, Inc. First								
		published in HDI Magazine, February 2000. 6 pages.								
w.c	AQ	"MEMS Feedback Control Using Through-Wafer Optical Device Monitoring J.M. Dawson, et al. Proceedings of SPIE Vol. 4178, 2000. Pages 221-							_	
		"A FLAT HIGH-FREQUENCY SCANNING MICROMIRROR," Robert A. Conant, et al.								
۵.0	AR	2000 Solid-State Sensor & Act Workshop, Hilton Head, S.C., June 4-8, 2000.								
			Surface/Bulk Micromachining (SBM) Process: A New Method for							
,	AS	Fabricating Released MEMS in Single Crystal Silicon," Sangwoo Lee, et								
w.C.		al. Journal of Microeletromechanical Systems, Vol. 8, No. 4, December 1999. Pages 409-416.								
<i>ن</i> ~. <sup>د</sup> ·	AT	"MEMS actuators for silicon micro-optical elements," Norman C. Tien and Daniel T. McCormick. Proceedings of SPIE Vol. 4178, 2000. 256-267.								
Examiner		$\sim$	n	ate Considered		. /	<i>[</i>			
Evaminer	1		"	ice compluered	8	3/22	103			
		<u> </u>				(				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

							51100	SC 2 OT		
U.S. Department of Commerce, Patent and Trademark Office						Serial No.: Unknown				
						Filing Date: 12/20/01				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT						Inventors: Novotny, et al.				
''MUL	TI-AX	IS MICRO-ELEC	TRO-MECHANI	CAL ACTUATOR"	Grou	Group Art Unit: Waknown 2673				
''MULTI-AXIS MICRO-ELECTRO-MECHANICAL ACTUATOR"						Examiner Name: Unknown				
Express Mail Receipt No. EF055078353US						Attorney Docket No.: AO-001				
			U.S. I	Patent Documents	3					
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date, If Appropriate			
	AU									
Foreign Patent Documents										
							Transla	tion		
		Document Number	Date	Country	Class	Subclass	Yes	No		
	AV	174.1.002								
						<del> </del>				
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)										
.).(،	AW	"Lightweight, Optically Flat Micromirrors for Fast Beam Steering," Jocelyn T. Nee, et al. Presented at IEEE/LEOS Optical MEMS 2000 Conference, August 21-4, 2000, Kauai, Hawaii, USA. 2 pages.								
W-C	AX	"Optical MEMS for Optical Communications - Trends and Developments," Veljko Milanovic. Adriatic Research Institute. Pages 2-6. Downloaded December 20, 2001.								
	AY									
	AZ									
	D.7									
	BA									
	ВВ									
	вс						-			
Examiner		$\mathcal{Q}$	Da	te Considered	E/201	/r3				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.										